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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,800	06/25/2001	Adriaan Retief Swanepoel	0182.00001	6013

7590 01/31/2005

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EXAMINER
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BALSIS, SHAY L

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/806,800	SWANEPOEL, ADRIAAN RETIEF	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shay L Balsis	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/7/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10, 13 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swanepoel ('650) in view of Quinlan ('395).

Swanepoel teaches a windscreen wiper with an elongated curved backbone that tapers uniformly in both thickness and width in a straight line manner from its center to its tips (col. 3, lines 36-37). The backbone is made from a single, unitary resiliently flexible beam. The backbone has a free form curvature as well as a compound curvature when in use. One of skill in the art would by routine experimentation find the optimum thickness and width for the backbone. It would have been obvious to one of skill in the art to make the thickness and width of Swanepoel remain constant to what is desired or required, including as claimed to optimize performance and life of the wiper.

Swanepoel teaches all the essential elements of the claimed invention however fails to teach a force applying member which is connected to the backbone at two spaced apart points. Swanepoel teaches a single centrally located connector for releasably connecting the wiper to a wiper arm.

Quinlan teaches a wiper comprising a force-applying member (38) connected to the center backbone at two spaced apart points (42). By observing the figures it is clear that the

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spacing between the points is between  $S_1=0.1*L$  and  $S_2=0.35*L$  where  $L$  is the length of the backbone and the ratio of the spacing distance between the points and the total length ( $R=S/L$ ) is between 0.1 and 0.35. The preferred spacing distance  $S_p$  between the spaced apart points is about  $S_p=0.363*L-0.000146*L^2$ . The preferred ratio  $R_p$  is about  $R_p=0.363-0.000146*L$ .

With regards to claim 13, the ratio of the Quinlan's spacing between the points and length of Quinlan's backbone is measured to be actually  $S_1=0.13*L$ . The difference between the actual ratio and the measured ratio is minimal and therefore can be considered to be an acceptable variance.

The force-applying member is connected to the backbone in such a manner to permit displacement between the force applying member and the backbone. It would have been obvious at the time the invention was made to use the connector as taught by Quinlan on the wiper blade of Swanepoel since the it is more versatile since Quinlan connector comprises a quick disconnect from the backbone and also from the wiper arm. Additionally, using the connection of Quinlan with increase strength of the beam. A force-applying member with two connection points instead of one will provide a sturdier beam. Substituting the connector of Swanepoel for the connector of Quinlan would allow for increased industrial applications.

While it is known that the drawings are not to scale, "a person skilled in the art would suspect that there was some reason for the relationships shown in the drawing and would not regard such disclosure as accidental or arbitrary." In re Reynolds, 443 F.2d 384, 170 USPQ 94. Therefore since a ratio or proportion is being claimed, it is known in the art to use drawings as a means for rejecting the claimed invention.

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***Response to Arguments***

Examiner is unsure where Applicant's measurements of  $S=12.7\text{mm}$  on the Quinlan reference come from. Examiner's measurements for figure 1 are  $L=208\text{mm}$  and  $S=27\text{mm}$ . For figure 17 the measurements are  $L=144\text{mm}$  and  $S=16\text{mm}$ .

As for the argument that the drawings cannot be used since they are not to scale, Examiner looks to the case law of In re Reynolds (170 USPQ 94). The Examiner is not using the measurements as exact measurement but rather using them to find a ratio. In re Reynolds teaches that though the drawings are not to scale, there is some reason for the relationships shown the drawings and they cannot be regarded as accidental or arbitrary. Therefore, the rejection of the Quinlan ('395) is maintained.

Applicant's arguments, with respect to Quinlan ('754) have been fully considered and are persuasive. The rejection of Quinlan ('754) has been withdrawn since only fragmentary illustrations are shown. Additionally, the arguments with respect to Quinlan ('395) in view of Swanpoel have been considered and are persuasive. The rejection of Quinlan in view of Swanpoel has been withdrawn.

***Allowable Subject Matter***

Claim 14 is allowed.

The following is an examiner's statement of reasons for allowance: Claim 14 includes the limitation that "at one of the points, the force applying member is connected to the backbone by means of a pin which is received in a longitudinal slot in the backbone so that relative longitudinal and pivotal movement between the pin and the backbone is permitted." Quinlan

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fails to teach a pin connecting the force applying member to the backbone that allows for relative longitudinal and pivotal movement.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

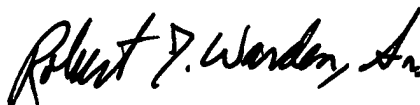
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L Balsis whose telephone number is 571-272-1268. The examiner can normally be reached on 7:30-5:00 M-Th, alternating F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Warden can be reached on 571-272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Slb  
1/10/05

  
ROBERT J. WARDEN, SR.  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700